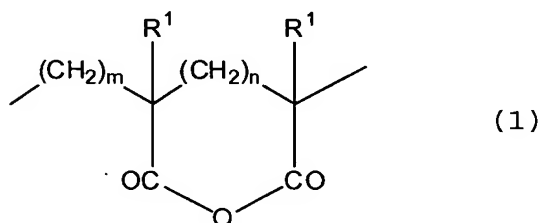


CLAIMS

1. An acrylic block copolymer (A) comprising a methacrylic polymer block (a) and an acrylic polymer block (b), at least one of the polymer blocks containing, in its main chain, at least one acid anhydride group (c) represented by formula (1):



(wherein R¹s each represent hydrogen or a methyl group and may be the same or different, n represents an integer of 0 to 3, and m represents an integer of 0 or 1).

2. The acrylic block copolymer according to claim 1, containing 0.1% by weight to 50% by weight of a carboxyl group (d).

3. The acrylic block copolymer according to claim 1, wherein the acrylic block copolymer is at least one type selected from the group consisting of (a-b)_n, b-(a-b)_n, and (a-b)_n-a.

4. The acrylic block copolymer according to claim 1, wherein the number-average molecular weight is 30,000 to 500,000.

5. The acrylic block copolymer according to claim 1, wherein the ratio (M_w/M_n) of the weight-average molecular weight (M_w) to the number-average molecular weight (M_n) according to gel permeation chromatographic measurement is 1 to 1.8.

6. The acrylic block copolymer according to claim 1, comprising 5% by weight to 80% by weight of the methacrylic polymer block (a) and 95% by weight to 20% by weight of the acrylic polymer block (b).

7. The acrylic block copolymer according to claim 1, wherein the methacrylic polymer block (a) contains the acid anhydride group (c).

8. The acrylic block copolymer according to claim 1, wherein the acrylic polymer block (b) contains the acid anhydride group (c).

9. The acrylic block copolymer according to claim 7, wherein the content of the acid anhydride group (c) is 0.1% by weight to 99.9% by weight.

10. The acrylic block copolymer according to claim 8, wherein the content of the acid anhydride group (c) is 0.1% by weight to 99.9% by weight.

11. The acrylic block copolymer according to claim 1, wherein the carboxyl group (d) is contained in the block containing the acid anhydride group (c).

12. The acrylic block copolymer according to claim 1,

wherein the acrylic polymer block (b) comprises 50% by weight to 100% by weight of at least one acrylate selected from the group consisting of n-butyl acrylate, ethyl acrylate, and 2-methoxyethyl acrylate, and 0% by weight to 50% by weight of another acrylate and/or a vinyl monomer copolymerizable with the acrylate.

13. The acrylic block copolymer according to claim 1, wherein the acrylic polymer block (b) comprises n-butyl acrylate, ethyl acrylate, and 2-methoxyethyl acrylate.

14. The acrylic block copolymer according to claim 1, wherein the acrylic polymer block (b) comprises n-butyl acrylate and 2-methoxyethyl acrylate.

15. The acrylic block copolymer according to claim 1, wherein the acrylic polymer block (b) comprises n-butyl acrylate and 2-ethylhexyl acrylate.

16. The acrylic block copolymer according to claim 1, containing a carboxyl group (e) produced in its side chains by hydrolytic ring opening of the acid anhydride group.

17. The acrylic block copolymer according to claim 1, wherein the acrylic block copolymer is produced by atom transfer radical polymerization.

18. A composition comprising the acrylic block copolymer (A) according to claim 1 and at least one selected from the group consisting of cross-linked rubber (B), a thermoplastic resin (C), a thermoplastic elastomer (D), a lubricant (E),

an inorganic filler (F), and a stabilizer (G).

19. The composition according to claim 18, comprising 0.5% by weight to 99.5% by weight of the acrylic block copolymer (A), and 99.5% by weight to 0.5% by weight of the thermoplastic resin (C) and/or the thermoplastic elastomer (D).

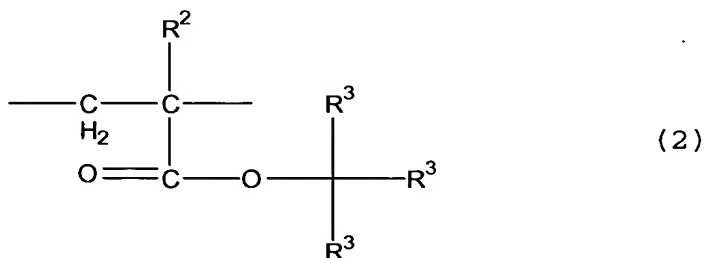
20. The composition according to claim 19, wherein the thermoplastic resin (C) is selected from the group consisting of a polyvinyl chloride resin, a polymethyl methacrylate resin, an acrylonitrile-styrene copolymer resin, a methyl methacrylate-styrene copolymer resin, a polycarbonate resin, a polyester resin, and a polyamide resin, and the thermoplastic elastomer (D) is selected from the group consisting of a styrene elastomer, an olefin elastomer, an urethane elastomer, a vinyl chloride elastomer, an amide elastomer, an ester elastomer, and an acryl elastomer.

21. The composition according to claim 18, comprising 0.01 parts by weight to 50 parts by weight of the lubricant (E) and/or 0.01 parts by weight to 300 parts by weight of the inorganic filler (F) on the basis of 100 parts by weight of the acrylic block copolymer (A).

22. The composition according to claim 18, wherein the acrylic block copolymer (A) contains at least one acrylate unit selected from the group consisting of a n-butyl

acrylate unit, an ethyl acrylate unit, and a 2-methoxyethyl acrylate unit.

23. A process for producing the acrylic block copolymer according to claim 1, the process comprising melt-kneading an acrylic block copolymer (A') at a temperature of 180°C to 300°C, the acrylic block copolymer (A') comprising a methacrylic polymer block (a) and an acrylic polymer block (b), at least one of the polymer blocks containing, in its main chain, at least one unit represented by formula (2):



(wherein R² represents hydrogen or a methyl group, and R³s each represent hydrogen, a methyl group, or a phenyl group, and may be the same or different as long as at least one R³ is a methyl group).

24. The process according to claim 23, wherein the acrylic block copolymer (A') is produced by controlled radical polymerization.

25. A process for producing the acrylic block copolymer according to claim 16, comprising melt-kneading the acrylic block copolymer (A) with water.

26. A seal product produced by molding the acrylic block copolymer (A) according to claim 1.

27. A seal product comprising the composition according to claim 18.

28. An automobile, electric, or electronic part comprising the acrylic block copolymer (A) according to claim 1.

29. An automobile, electric, or electronic part comprising the composition according to claim 18.